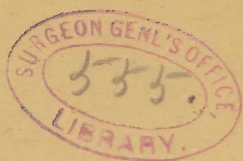


DYAR (H. G.)

A machine for tubing
bacterial media.



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A MACHINE FOR TUBING BACTERIAL MEDIA.

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IN preparing large quantities of standard media for the use of classes in bacteriology, it has been found that considerable time was wasted by the older methods of tubing the material. In order to shorten this irksome portion of the process, the apparatus here described was devised by the instructor and his assistants. While not embodying a new principle, the machine has proved of great convenience, so that it has been thought worth while to describe it for the benefit of others in a similar position to our own.

The machine is capable of being operated by one man, for all media in ordinary use which may be rendered sufficiently fluid, at the rate of five hundred to six hundred tubes an hour. This includes the measurement of the amount in each tube with considerable accuracy, while the position and motions required for the operator are comfortable and not fatiguing.

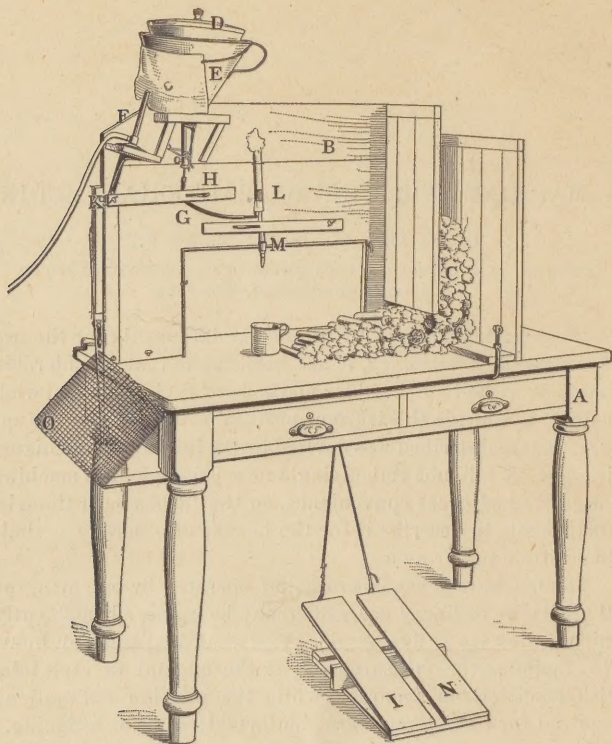
The apparatus (see figure) rests on an ordinary table (A). A frame of board (B) supports it, and also serves as a receptacle for empty test tubes (C), which feed down to the hand as shown. A funnel (D), surrounded by a water jacket (E), capable of being kept hot by a lamp (F), contains the medium to be tubed. This feeds down a rubber tube (G), closed by an ordinary spring clamp (H). This clamp is opened by a pedal used by the left foot (I) and attached to a bar (K) by a string passed over three pulleys. The tube feeds into a larger graduated glass tube (L), which is emptied by a short rubber tube (M), closed by a clamp similarly operated by the right foot on a second pedal (N). The pedals are balanced on a central bar, so that when the tubes are both closed the feet are at rest, while a depression of the toe of either foot opens

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2 A MACHINE FOR TUBING BACTERIAL MEDIA.

the corresponding clamp. Both hands are left free for manipulating the tubes and placing them in the basket (O), while the receptacle (L) is refilling for the next tube. The



amount in each tube is measured by the graduation of this receptacle. An inverted flask with thistle tube may be substituted for the funnel containing the medium.



